AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Serial Number: 09/460,742

Filing Date: December 14, 1999

Title: DEVICE AND METHOD FOR CONTROLLING VOLTAGE VARIATION

Assignee:Intel Corporation

## **REMARKS**

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Claims 4, 9, and 29 are amended, no claims are added, no claims are cancelled; and as a result, claims 4-6, 9, 10, 14-16, and 29-37 are now pending in the application. Claims 4 and 29 were not amended in response to an art rejection. They were amended to clarify the meaning of a term in the claim. Support for the amendments to claims 4 and 29 is found, for example, at page 6, lines 10-12. Support for the amendment to claim 9 is found, for example, in Fig. 1A.

## §102 Rejections of the Claims

Claims 9 and 10 were rejected under 35 U.S.C. § 102(b) as being anticipated by Mead et al. (U.S. 5,844,265).

Claim 9, as amended, recites, "wherein the high power supply voltage node and the low power supply voltage node are not signal nodes." In contrast, Mead *et al.* teaches signal nodes, input node 18 and output node 28. Hence, the Office action fails to teach each of the elements of claim 9, as amended. Thus, the Office action fails to state a *prima facie* case of anticipation with respect to claim 9, as amended. Therefore, applicant requests withdrawal of the rejection and reconsideration and allowance of claim 9.

Claim 10 is dependent on claim 9. For reasons analogous to those stated above and elements in the claim, applicant respectfully submits that the Office action fails to state a *prima facie* case of anticipation with respect to claim 10.

## §103 Rejections of the Claims

Claims 4-6 and 14-16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Choi (U.S. 6,060,930) in view of Manning *et al.* (U.S. 5,962,887). Applicant does not admit that either Choi or Manning *et al.* is prior art and reserves the right to "swear behind" Choi and Manning *et al.* as provided for under 37 C.F.R. 1.131. Applicant respectfully traverses the rejection of claims 4-6 and 14-16.

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Claim 4, as amended, recites, "a gate oxide layer having a thickness of between about 20 angstroms and about 40 angstroms." In contrast, neither Choi nor Manning *et al.* teach or suggest "a gate oxide layer having a thickness of between 20 about angstroms and about 40 angstroms." The office action in paragraph 5, page 4, states that the oxide thickness is an obvious design choice and that the specification does not disclose the criticality of the oxide thickness. Applicant respectfully disagrees. The specification at page 6, line 10 states that "A thickness of less than about 20 angstroms may result in manufacturing devices that have low yields, while a thickness of more than about 40 angstroms may result in a device frequency response that is lower than desired." Thus, selection of a range of thicknesses for the oxide layer is not a obvious design choice. Hence, the Office action fails (by failing to provide references that teach or suggest each of the elements) to state a *prima facie* case of obviousness with respect to claim 4. Therefore, applicant requests withdrawal of the rejection and reconsideration and allowance of claim 4.

Claims 5 and 6 are dependent on claim 4. For reasons analogous to those stated above and elements in the claims, applicant respectfully submits that the Office action fails to state a *prima facie* case of obviousness with respect to claims 5 and 6. Therefore, applicant requests withdrawal of the rejections and reconsideration and allowance of claim 5 and 6.

Claim 14 recites, "an electronic device having a variable capacitance characteristic . . . that is permanently coupled between the ground node and the power supply voltage node." In contrast, neither Choi nor Manning *et al.* teach or suggest, either alone or in combation, "an electronic device . . . that is permanently coupled between the ground node and the power supply voltage node." Choi, in Fig. 1, shows NM1\* connected between ground and a signal line. Manning *et al.*, in Fig. 8, shows a switch 490 connecting either Vcc or GND to capacitor 380. Thus, the references fail to teach or suggest, either alone or in combination, each of the elements of claim 14. Hence, the Office action fails to state a *prima facie* case of anticipation with respect to

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claim 14. Therefore, applicant requests withdrawal of the rejection and reconsideration and allowance of claim 14.

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Claims 15 and 16 are dependent on claim 14. For reasons analogous to those stated above and the elements in the claims, applicant respectfully submits that the Office action fails to state a prima facie case of obviousness with respect to claims 15 and 16. Therefore, applicant requests withdrawal of the rejections and reconsideration and allowance of claims 15 and 16.

Claim 29 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Choi in view of Manning et al. and Yoneda et al. (U.S. 4,906,594). Applicant does not admit that either Choi or Manning et al. is prior art and reserves the right to "swear behind" Choi and Manning et al. as provided for under 37 C.F.R. 1.131. Applicant respectfully traverses the rejection of claim 29.

Claim 29 recites, "a gate oxide layer having a thickness of between 20 angstroms and about 40 angstroms." For reasons analogous to those state above with respect to claim 4, applicant respectfully submits that the Office action fails to state a prima facie case of obviousness with respect to claim 29. Therefore, applicant requests withdrawal of the rejection and reconsideration and allowance of claim 29.

Claims 30 and 31 were also rejected under 35 U.S.C. § 103(a) as being unpatentable over Choi in view of Manning et al. and Yoneda et al. and Jones et al. (U.S. 5,632,855). Applicant does not admit that either Choi or Manning et al. is prior art and reserves the right to "swear behind" Choi and Manning et al. as provided for under 37 C.F.R. 1.131.

Claims 30 and 31 are dependent on claim 29. For reasons analogous to those stated above and elements in the claims, applicant respectfully submits that the Office action fails to state a prima facie case of obviousness with respect to claims 30 and 31. Therefore, applicant requests withdrawal of the rejections and reconsideration and allowance of claims 30 and 31.

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Claims 32 and 33 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Mead *et al.* (U.S. 5,844,265) in view of Abrokwah *et al.* (U.S. 5,539,248).

Applicant respectfully traverses the rejections of claims 32 and 33.

Claim 32 recites, "a transistor coupled between the high power supply voltage node and the low power supply voltage node." In contrast, Mead *et al.*, in Fig. 1, shows a transistor 32 coupled to between an input node 18 and an output node 28. The input node 18 is not a high power supply node. Mead *et al.* provides a high power supply node at node 20. The output node 28 is not a low power supply node. Mead *et al.* provides a low supply node at node 24. Thus, neither Mead *et al.* nor Abramowah *et al.* teach or suggest, either alone or in combination, each of the elements of claim 32. Thus, the Office action fails to state a *prima facie* case of obviousness with respect to claim 32. Therefore, applicant requests withdrawal of the rejection and reconsideration and allowance of claim 32.

Claim 33 is dependent on claim 32. For reasons analogous to those state above and elements in the claims, applicant respectfully submits that the Office action fails to state a *prima facie* case of obviousness with respect to claim 33. Therefore, applicant requests withdrawal of the rejection and reconsideration of claim 33.

Claim 34 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Mead et al. in view of Abrokwah et al. and Manning et al. Applicant does not admit that Manning et al. are prior art and reserves the right to "swear behind" Manning et al. as provided for under 37 C.F.R. 1.131. Applicant respectfully traverses the rejection of claim 34.

Claim 34 is dependent on claim 33. For reasons analogous to those stated above and elements in the claims, applicant respectfully submits that the Office action fails to state a *prima facie* case of obviousness with respect to claim 34. Therefore, applicant requests withdrawal of the rejection and reconsideration and allowance of claim 34.

Claims 35-37 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Choi in view of Manning *et al.* and McKee *et al.* (U.S. 6,143,072). Applicant does not

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admit that any of the documents, Choi, Manning et al., or McKee et al., are prior art and reserves the right to "swear behind" Choi, Manning et al., and McKee et al. as provided for under

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37 C.F.R. 1.131. Applicant respectfully traverses the rejection of claims 35-37.

Claim 35 recites, "an electronic device having a variable capacitance characteristic . . . that is permanently coupled between the ground node and the power supply voltage node." In contrast, not Choi nor Manning et al. nor McKee teach or suggest, either alone or in combination, "an electronic device . . . that is permanently coupled between the ground node and the power supply voltage node." Choi, in Fig. 1, shows NM1\* connected between ground and a signal line. Manning et al., in Fig. 8, shows a switch 490 connecting either Vcc or GND to capacitor 380. McKee et al. is directed to preparing a crystalline oxide on a group IV semiconductor substrate, as recited in the title. Thus, documents fail to teach or suggest, either alone or in combination, each of the elements of claim 35. Hence, the Office action fails to state a prima facie case of anticipation with respect to claim 35. Therefore, applicant requests withdrawal of the rejection and reconsideration and allowance of claim 35.

Claims 36 and 37 are dependent on claim 35. For reasons analogous to those stated above and elements in the claims, applicant respectfully submits that the Office action fails to state a prima facie case of obviousness with respect to claims 36 and 37. Therefore, applicant requests withdrawal of the rejections and reconsideration and allowance of claims 36 and 37.

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## **CONCLUSION**

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone applicant's attorney at 612-371-2109 to facilitate prosecution of the application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743

Respectfully submitted,

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CERTIFICATE UNDER 37 C.F.R. 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to: Mail Stop Non-Fee Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this Later and April, 2004.

Name